NGDA Dataset Report

Official NGDA Title: Geostationary Operational Environmental Satellite (GOES) Imager Data

Metadata Record Title: NOAA Geostationary Operational Environmental Satellite (GOES) Imager

Data

A-16 NGDA Theme: Climate and Weather

Executive NGDA Theme Champion(s):

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Dataset Manager(s):

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Metadata:

Registration Status: Complete

Registered on 3/12/2015

GeoPlatform Link*: http://www.geoplatform.gov/node/243/b48ea505-b9c0-4fb6-89ec-

2a5715f5d978

Data.gov Metadata Link*: <a href="http://catalog.data.gov/harvest/object/0c2ec6db-ce9b-4d55-a9db-data.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b-addata.gov/harvest/object/0c2ec6db-ce9b

a62f96f50ba3/html

^{*}If the metadata has been updated and reharvested after publication of this report, the link may no longer be valid. The dataset may be searched for manually in Data.gov or GeoPlatform.gov.

NGDA Lifecycle Maturity Assessment (LMA) Report

Time Frame:

1980-01-01 to Present

LMA Submission:

Status: Complete Date: 10/28/2015

Extension Requested: Yes

LMA Reviewer(s):

Supervisor: nancy ritchey **Theme Lead:** Did not review

Executive Champion: Did not review

SAOGI*: Did not review

Other: Did not review

LMA Verifier:

Name: nancy ritchey

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Attachments:

To get access to any attachments referenced in the report, email the LMA Help Desk at NGDA_LMA_help@fgdc.gov. Please use the subject "Dataset Report Attachment(s)" and indicate the associated official NGDA title.

^{*}Senior Agency Official for Geospatial Information (SAOGI)

Lifecycle Maturity Assessment (LMA) Summary

Overall Maturity:

Optimized; Established

General Questions: 100%

Optimized; Established

Stage 1 - Define/Plan: 100%

Optimized; Established

Stage 2 - Inventory/Evaluate: 100%

Optimized; Established

Stage 3 - Obtain: 92%

Optimized; Established

Stage 4 - Access: 100%

Optimized; Established

Stage 5 - Maintain: 100%

Optimized; Established

Stage 6 - Use/Evaluate: 77%

Mature; Consistent

Stage 7 - Archive: 100%

Optimized; Established

NGDA Dataset Maturity Definitions:

How To Calculate Maturity: https://www.geoplatform.gov/sites/default/files/How to Calculate Maturity.pdf

Maturity	Maturity Characteristics for All Lifecycle Stages
Optimized; Established Rank = 5	Dataset meets virtually all business needs of all users. The dataset is considered authoritative by owners and secondary users. It is curated across all stages of the approved lifecycle. Future needs are defined on a regular basis and resources for addressing both current and future business requirements are available.
Mature; Consistent Rank = 4	Dataset meets all the business needs of the primary owner and most of the secondary users. The dataset is curated and used as authoritative by the primary owner. Dataset is used widely by secondary users actively engaged in sustaining the dataset. Future needs are identified and steps are planned to address these. All stages are supported and reviewed on a recurring basis. The dataset is well managed in relation to the approved lifecycle.
Managed; Predictable Rank = 3	Dataset meets a significant number of the business needs of the primary owner and is widely used as an authoritative resource by secondary users. Benchmark activities are occurring in at least four of the approved lifecycle stages. Management practices in relation to the approved lifecycle is moderate but consistent. Dataset is integrating changing business requirements in lifecycle stages impacting overall maturity.
Transition; Transformation Rank = 2	Dataset meets business needs of the primary owner and has moderate use by secondary users. Benchmark activities are occurring in at least three stages. Efforts to integrate funding, include partners, and obtain data are not supported in a sustained manner. Management practices in relation to the stages of the approved lifecycle is limited.
Planned; Initial Development Rank = 1	Dataset limited in meeting business needs of the primary owner. Benchmark activities in the approved lifecycle are just starting to consider secondary uses, partnerships are forming to support additional dataset uses. Dataset development is in a very early stage. Minimal or limited management against the benchmarks in the approved lifecycle.
No Activity Rank = no activity	Dataset meets project or local business needs of the primary owner, secondary or additional uses or users were not considered, not recognized as an authoritative data or is part of a similar dataset. Not managed to any of the benchmarks in the approved lifecycle.

General Questions for All Stages

1) Is there a recurring process to obtain funding for all lifecycle stages of this dataset?

Answer: Funding support is part of agency budget on a recurring basis, funding is consistent and tied to business processes, and supports all lifecycle stages.

Justification Comment:

Attachment(s): 0

As a NOAA Climate Data Record (CDR), adequate funding to develop, operate and maintain the dataset is provided through the CDR Program. Key components of the Program include competitive grants, contracts, and interagency coordination.

Is there a process in place to ensure that open government and transparency guidelines are followed in all lifecycle stages for this dataset?

Answer: Process is published as appropriate with respect to sensitivity requirements, process is transparent, published appropriately.

Justification Comment:

Attachment(s):

0

The CDR Program's six-phase Research-to-Operations process that is described in the Developers Guidelines, at: http://www.ncdc.noaa.gov/cdr/guidelines.html

Are there processes and tools in place so that staff are sufficiently knowledgeable to ensure a continuity of the dataset for all stages of the lifecycle, especially during staffing transitions?

Answer: Processes and tools to ensure dataset continuity are in place and implemented for all lifecycle stages.

Justification Comment:

Attachment(s):

Internal process documentation and group charters are available from the CDR Program (CDRP) upon request. Contact the CDRP document library, at CDR ProgramDOCLIB.ncdc@noaa.gov https://www.ncdc.noaa.gov/cdr/development-guidelines

STAGE 1 - Define/Plan

4) Are user and business requirements defined and formalized?

Answer: A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

Justification Comment:

Attachment(s):

0

Prior to committing resources to a new CDR, a comprehensive assessment is conducted by the assigned science lead to determine whether the CDR is mature enough for transition. This assessment will help determine the level of effort needed to meet the initial operating condition requirements. The science lead provides a presentation with a recommendation to the CDR Program. The CDR Program Manager reviews the assessment and makes the final decision on whether to proceed or not with the CDR. A similar process is employed for existing CDRs through a Change Request (CR) review process.

5) How are partners/stakeholders involved in the requirements collection process?

Answer: A recurring process is in place, including defining new partner and stakeholder business needs as they arise, and is fully implemented.

Justification Comment:

Attachment(s):

0

Users may "Register" for any product of interest on the CDR website; registration enables the CDR Program to provide announcements of product status, changes and updates, and provides a pathway for optional user feedback on product quality, existing applications and emerging uses of the data. Additional outreach efforts to current and new stakeholders is an ongoing process with the CDR Program

6) Is there a quality assurance process for the dataset?

Answer: Quality assurance published as appropriate with respect sensitivity requirements.

Justification Comment: Attachment(s): 0

The CDRP guidelines ensure all CDRs meet the Global Climate Observing System (GCOS) standard of quality.

7) Is there a process to evaluate the sensitivity, privacy, and confidentiality of this dataset?
Answer: Sensitivity, privacy, and confidentiality evaluations fully implemented, reviewed and updated on a recurring basis.

Justification Comment: Attachment(s): 0

The NOAA CDR Program's official distribution point for CDRs is NOAA's National Climatic Data Center which provides sustained, open access and active data management of the CDR packages and related information in keeping with the United States' open data policies and practices as described in the President's Memorandum on "Open Data Policy" [1] and pursuant to the Executive Order of May 9, 2013, "Making Open and Machine Readable the New Default for Government Information" [2]. In line with these policies, the CDR data sets are non-proprietary, publicly available, and no restrictions are placed upon their use.

The software used to produce the CDRs may or may not be Government owned, and is outside of the scope of the Open Data policies, so permissions to re-use or modify the CDR production software should be sought from the software's copyright owner identified within its source code.

- [1] https://www.whitehouse.gov/sites/default/files/omb/memoranda/2013/m-13-13.pdf
- [2] https://www.whitehouse.gov/the-press-office/2013/05/09/executive-order-making-open-and-machine-readable-new-default-government-
- 8) Are defined data standards used in collecting, processing, and/or rendering the data? **Answer:** Standards fully implemented documented and published as appropriate.

Justification Comment:

Attachment(s): 0

The CDR Program institutes standards for data formatting, metadata, documentation and source code per Program requirements. These standards can be found on the CDR Development Guidelines page: http://www.ncdc.noaa.gov/cdr/guidelines.html

STAGE 2 - Inventory/Evaluate

9) Is there a process for determining if data necessary to meet requirements already exist from other sources (either within or outside the agency) before collecting or acquiring new data?

Answer: Process for determining appropriate data is being reused fully implemented, reviewed, and updated on a regular basis.

Justification Comment:

Ensuring the product is unique in meeting target requirements is part of the CDRP assessment and National Centers for Environmental Information archive appraisal processes.

STAGE 3 - Obtain

10) Is there a process for obtaining data in relation to this dataset?

Answer: Process is fully implemented, reviewed and updated on a regular basis.

Justification Comment:

Attachment(s): 0

Attachment(s):

In addition to source code and supporting documentation, the CDR Program identifies and attempts to also archive related input datasets. The lineage of the dataset is fully documented and all versions are archived and made available.

11) Is the metadata in a FGDC endorsed geospatial metadata standard?

Answer: Metadata is available in a format endorsed by the FGDC, it fully describes the dataset and

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provides all the information required to make the dataset discoverable, accessible, and usable.

Justification Comment: Attachment(s):

ISO metadata link: NOAA Geostationary Operational Environmental Satellite (GOES) Imager Data - National Geospatial Data Asset (NGDA) Geostationary Operational Environmental Satellite (GOES) Imager Data

12) How complete is the geographic coverage as defined in the requirements for the dataset?

Part 1 Answer: Business requirement targets are being attained, cyclic updates being assessed.

Part 2 Answer: Dataset has presently attained the greatest geographic coverage as defined by the current requirements or roughly 100%.

Justification Comment: Attachment(s):

CDR Program strives to adopt products with the most complete coverage at the highest resolution possible for their purpose.

Global coverage using all adequate sensor data available in the period of record.

STAGE 4 - Access

13) Do you have a process for providing users access to the data in an open digital machine readable format?

Answer: User access process is fully implemented, data is available, process is reviewed and updated on a recurring basis.

Justification Comment: Attachment(s): 0

The archived data record is made available through an online search and order interface, and is continually updated with operational data.

STAGE 5 - Maintain

14) Is there a maintenance process for updating and storing the dataset?

Answer: Dataset maintenance process is fully implemented and processes are reviewed and periodically updated.

Justification Comment: Attachment(s): 0

The CDR Program reviews its datasets periodically for meeting Program requirements. CDR updates go through the standard assessment process as it undergoes version improvements by the research team. The updates follow SOP for change requests under the Operations and Management PM. Resources for the hardware/software/labor to generate and store the CDR are funded by the CDR Program.

15) Is there an error correction process as part of dataset maintenance?

Answer: Error correction process includes user notification, process reviewed on a recurring basis.

Justification Comment: Attachment(s): 0

Revised data are subject to the CDRP change request process. Registered users are notified of changes and revised data submissions are coordinated with the NCEI archive.

http://www1.ncdc.noaa.gov/pub/data/sds/cdr/Guidelines/Change_Request_Process_Flow.pdf

STAGE 6 - Use/Evaluate

16) Is there a process to determine if the dataset meets user needs?

Answer: Process is complete and being implemented on ad hoc basis.

Justification Comment: Attachment(s): 0

The CDR Program has used consulting services from Acclimatise to understand CDR usage and how to meet user needs.

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17) Is there a process to provide users information on how to access and properly use the dataset?
Answer: Process is fully implemented supporting access and proper use, process is reviewed on a recurring basis.

Justification Comment: Attachment(s):

The CDR Program supports access to data, documentation and source code for all CDR datasets at NCEI.

http://www.ncdc.noaa.gov/cdr/operationalcdrs.html

18) Are the business processes and management practices assessed to meet changing technology? **Answer:** Assessment process implementation started for taking advantage of changing technology.

Justification Comment: Attachment(s): 0

The CDR Program reviews source code generation and maintenance practices. The dataset is also assessed by the Program for its data access technologies.

STAGE 7 - Archive

19) Is there an archiving process for the dataset?

Answer: Archival and disposition processes are fully implemented.

Justification Comment:

All historical data and near real-time operational data are archived for every version and revision under submission agreement at NCEI. NCEI has NARA-approved retention schedules in place for this data type.

Attachment(s):